## Four Mordellistena species (Coleoptera: Mordellidae) new to Sweden

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Four *Mordellistena* species are reported as new to the Swedish fauna: *M. dieckmanni* Ermisch, *M. pseudopumila* Ermisch, *M. koelleri Ermisch*, and *M. dalmatica* Ermisch. Diagnostic characters are discussed and the two first-mentioned species are compared with *M. pumila* (Gyll.).

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Kangas (1978) reported *Mordellistena carinthiaca* Ermisch as a species new to the Swedish fauna. Rutanen has recently collected more material of *Mordellistena* from Sweden which includes three additional species that are new to Sweden. In material received from Stig Lundberg we have found another species new to Sweden. We present these four species here and discuss problems relating to the *M. pumila* group.

Mordellistena dieckmanni Ermisch. - 1♂, Södermanland, Tystberga, 4.7.1978, from the flowers of a Galium species (? G. album). M. dieckmanni is a very close relative of M. pumila (Gyllenhal.). Ermisch (1969:184) mentioned a few morphological differences between these two species which are difficult to verify and considered the apex (lancet) of the penis to be the best character for separating them. We have made additional observations regarding differences in penis morphology between the two species (Fig. 1). In M. pumila the middle and base of the penis are much broader than the distal 1/3, which after a very narrow intermediary section, gradually broadens, although hardly to half the breadth of the middle and base (Fig. 1p). In M. dieckmanni, the whole penis is very narrow, except for the apex (lancet), which broadens abruptly, so that it somewhat resembles a spoon (Fig. 1d). The differences in the parameres are less marked, but perceptible (Fig. 2).

Ermisch (1969:184) mentions the dimensions and shape of the elytra as characters for separating these two species. The relation between the length and breadth of the elytra is of questionable value, for the difference between these species is very small and depends greatly on how the dimensions are measured. The shape of the elytra is a better character. In M. dieckmanni, the elvtra are parallel for two-thirds of their length, the narrowing of the hind part being sharp (Fig. 3d), whereas in M. pumila the narrowing occurs in the latter half, the hind part being cone-shaped (Fig. 3p). According to Ermisch (1969:184), the iridescence of the hairy coat of the elytra is lacking in M. dieckmanni. However, in M. pumila it may also often be weakly iridiscent, and in M. dieckmanni, iridiscence may be faintly visible. Thus, this character may be somewhat unreliable.

Mordellistena pseudopumila Ermisch. − 1♀, Södermanland, Tullgarn, 1.7.1969, collected in a stand with old oaks, probably from flowers of Anthriscus silvestris (Stig Lundberg leg.). This species is common in Finland and probably also in Sweden. It is very closely related to M. pumila and can only be confused with this species. In M. pseudopumila, however, the distal (5-10) segments of the antenna are shorter, at most 1/4 longer than broad (Ermisch 1969:184; Kangas 1976:179, 181). In M. pseudopumila, the distal segment (apex) is oblong and relatively shorter

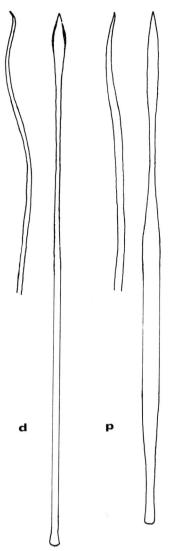


Fig. 1. The penis of *Mordellistena dieckmanni* (d) and *M. pumila* (p) in dorsal view and the apical part in lateral view. Orig.

Penis av *Mordellistena dieckmanni* (d) och *M. pumila* (p) ovanifrån och spetshälften från sidan. Orig.

than in *M. pumila*. The pygidium is also shorter, and tapers more sharply than in *M. pumila* (Fig. 4).

Modellistena koelleri Ermisch. – 20, Öland, Bostorp, 1.7.1978 (R. Batten det.), collected with an insect net. This species is found also in Denmark

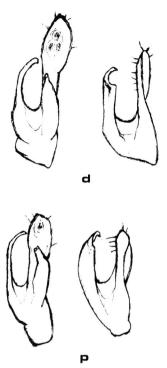


Fig. 2. The parameres of *Mordellistena dieckmanni* (d) and *M. pumila* (p). The right (taller) paramere in medial view, the left paramere in lateral view. Orig.

Paramererna av *Mordellistena dieckmanni* (d) och *M. pumila* (p). Den högra parameren (större) från insidan, den vänstra från utsidan. Orig.

(Ermisch 1969:184). The species is closely related to *M. hollandica* Ermisch. It has a short and thick pygidium, in lateral view almost straight lateral pronotal margins, and obtuse posterior angles of the pronotum.

Mordellistena dalmatica Ermisch. – 10°, Södermanland, Tystberga, 4.7.1978, collected from the flowers of a Galium species (? G. album). M. dalmatica is a large species belonging to the pentas Mulsant species group. It is easily identified using structural characters in the hind legs (Kangas 1976:180,181). The second joint of the hind tarsus in M. dalmatica has three oblique incisions, while the M. pumila group has only two.

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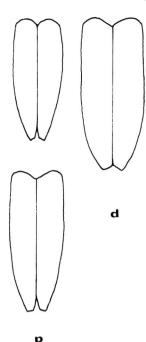


Fig. 3. The shape of the elytra in Mordellistena pumila O' (p, two individuals) and in M. dieckmanni O' (d). Orig.

Täckvingarnas form hos Mordellistena pumila ♂ (p, två individer) och hos M. dieckmanni od (d). Orig.

Stig Lundberg (Luleå, Sweden) for additional material of Mordellistena.

## Sammanfattning

Modellistena dieckmanni Ermisch, M. pseudopumila Ermisch, M. koelleri Ermisch och M. dalmatica Ermisch anmäls som nya arter för Sverige. M. dieckmanni står mycket nära M. pumila (Gyll.) men skiljs lättast från denna art genom hanens smalare penis (Fig. 1). Hos M. pumila konvergerar täckvingarnas ytterkanter redan från

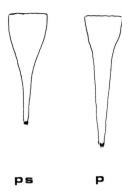


Fig. 4. The pygidium of Mordellistena pseudopumila (ps) and M. pumila (p). Orig.

Pygidium av Mordellistena pseudopumila (ps) och M. pumila (p). Orig.

mitten medan de hos M. dieckmanni närmar sig varandra först i den bakre tredjedelen (Fig. 3). Även M. pseudopumila står nära M. pumila. Hos M. pseudopumila är de yttre antennlederna samt pygidiet kortare än hos M. pumila (Fig. 4). M. koelleri Ermisch är närstående M. hollandica Ermisch och är funnen även i Danmark. Den har ett kort tjockt pygidium, nästan rak kant på halsskölden sett från sidan samt trubbiga bakhörn på halsskölden. M. dalmatica är en stor art tillhörande pentas-gruppen. Den andra bakfotsleden har tre inskärningar hos M. dalmatica medan den hos pumila-gruppen har två.

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